

Phase Transitions, Photofragmentation, and Ultrafast Dynamics: Experiments Using Circularly Polarized X-rays

Anthony Young

With the advent of insertion devices that directly produce high brightness and high flux beams of circularly polarized x-rays, many experiments that were formerly difficult or impractical to perform are now quite feasible. This talk will give a short introduction to the production of circularly polarized x-rays, and then illustrate the utilization of these polarized photons in several different experiments. Also included will be a discussion of a new experiment at BL4.0 that uses an x-ray streak camera to study ultrafast magnetic processes.